

What is claimed is:

1. An apparatus comprising:

a memory storage unit to store an electronic version of a page; and

5 a processor coupled to the memory storage unit and configured to receive data associated with a handwritten notation applied to a printed page and an electronic image of an area of the printed version of the page near the notation, to identify a corresponding passage in the electronic version of the page and to create an electronic notation based on the received data and associated with the corresponding passage.

10 2. The apparatus of claim 1 wherein the processor is configured to identify the electronic version of the page based on a received page identifier.

15 3. The apparatus of claim 1 wherein the processor is configured to identify a first portion of the electronic image that represents the area of the printed page and to identify a second portion of the electronic image that represents the handwritten notation.

4. The apparatus of claim 3 wherein the processor is configured to apply optical character recognition to transform the first portion of the electronic image into digital text.

5. The apparatus of claim 4 wherein the processor is configured to identify the corresponding passage by searching the electronic version of the page for the digital text.

6. The apparatus of claim 1 wherein the processor is configured to create a bitmap image based on the data associated with the handwritten notation and to identify a correlation with the corresponding passage of the electronic version of the page.

7. The apparatus of claim 1 wherein the processor is configured to apply handwritten character recognition to transform the data associated with the handwritten notation into digital text and to identify a correlation between the digital text and the corresponding passage.

8. A system comprising:

a computer comprising a processor and a memory storage device storing an electronic version of a printed page; and

a writing utensil to apply a notation to the printed page, the writing utensil including a scanner positioned to scan a

surface of the printed page as the notation is being applied to the printed page;

wherein the processor includes a port to receive from the writing utensil stroke data associated with a notation applied by the writing utensil and an electronic image of an area of the printed page associated with the applied notation, and is configured to create an electronic notation based on the stroke data and associated with a corresponding part of the electronic version of the printed page.

10. 9. The system of claim 8 wherein the port is configured to receive an image of a page identifier scanned by the scanner and the processor is configured to identify the electronic version of the printed page in the memory storage device based on the received image of the page identifier.

15. 10. The system of claim 8 wherein the port is configured to apply optical character recognition to transform a part of the electronic image that represents the area of the printed page near the applied notation into digital text.

11. The system of claim 10 wherein the processor is configured to identify the corresponding part of the electronic version of

the printed page by searching the electronic version of the printed page for a passage containing the digital text.

12. The system of claim 8 wherein the processor is configured to create a bitmap image based on the received stroke data and to identify a correlation between the bitmap image and the corresponding part of the electronic version of the printed page.

13. The system of claim 8 wherein the processor is configured to apply handwritten character recognition to transform the stroke data into digital text.

14. A method comprising:

applying a handwritten notation with a writing utensil to a page that includes a printed passage with which the notation is associated;

capturing stroke data associated with the notation;

scanning a portion of the associated printed passage with a

scanner connected to the writing utensil to create a scanned image; and

correlating the captured stroke data with a particular portion of an electronic version of the page based on the scanned image.

15. The method of claim 14 comprising identifying a portion of the scanned image that represents the associated printed passage and applying optical character recognition to transform the  
5 portion into digital text.

16. The method of claim 15 comprising identifying the particular portion of the electronic version of the page by searching the electronic version of the page for a specific  
10 passage containing the digital text.

17. The method of claim 14 wherein capturing the stroke data comprises utilizing an echo-location technique.

18. The method of claim 14 wherein the page comprises grid marks and wherein capturing the stroke data comprises utilizing  
15 an image processing technique to track movement of the writing utensil based on the grid marks.

19. The method of claim 14 comprising creating a bitmap image  
20 based on the captured stroke data.

20. The method of claim 14 comprising applying handwritten character recognition to convert the stroke data into digital text.

5 21. The method of claim 20 comprising creating a link between the digital text and the particular portion of the electronic version of the page.

10 22. The method of claim 14 wherein correlating the captured stroke data with the particular portion of the electronic version of the page comprises employing a pattern recognition technique.

15 23. An article comprising a computer-readable medium that stores computer-executable instructions for causing a computer system to:

20 create an electronic notation in response to received data associated with a handwritten notation applied to a printed version of a page and a received electronic image of a passage identifier indicative of a printed passage on the page; and

indicate an association between the electronic notation and a corresponding passage of the electronic version of the page based on the received electronic image.

24. The article of claim 23 comprising computer-executable instructions for causing the computer system to identify an electronic version of the page in response to a received page identifier associated with the printed version of the page.

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25. The article of claim 23 comprising computer-executable instructions for causing the computer system to apply optical character recognition to transform the received passage identifier into digital text and to identify the corresponding passage of the electronic version of the page by searching the electronic version of the page for a passage containing the digital text.

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26. The article of claim 25 comprising computer-executable instructions for causing the computer system to indicate a correlation between the data associated with the notation and the passage containing the digital text.

27. An apparatus comprising:

a writing utensil to selectively dispense a writing medium onto a printed page for creating a notation and to capture stroke data associated with the notation;

a scanner connected to the writing utensil and positioned to scan an area of the printed page near the notation to create an image;

a processor coupled to the writing utensil and the scanner  
5 to identify a correlation between the stroke data and the image;  
and

memory to store the notation data, the image and the correlation.

10 28. The apparatus of claim 27 comprising a wireless  
transmitting device to transmit the image to a remote device.

15 29. The apparatus of claim 27 comprising an adjustable power  
switch to enable a user to selectively disconnect a power source  
from the scanner.

30. The apparatus of claim 27 comprising a conductive contact  
positioned to mate with an external adapter to transmit the  
image to a remote device.

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